

SOUTHWEST ALASKA
TRANSPORTATION PLAN

DATA INVENTORY
TECHNICAL MEMORANDUM

prepared for the
Alaska Department of Transportation and Public Facilities

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INTRODUCTION

PURPOSE

The purpose of this Technical Memorandum is to describe existing data relevant to inter-community transportation in the Southwest region and assess their adequacy in meeting the data needs for the development of the Southwest Alaska Transportation Plan. The uses for data in the transportation plan development process are discussed and existing sources of available data are identified. Additional data needs are described. A variety of data are examined, including demographic data, data on marine transportation, air transportation and land transportation, visitor data, and geographic data.

STUDY BACKGROUND

This study is preparing a regional transportation plan for the Southwest region of Alaska. This plan is part of a series of regional transportation plans being developed by the Alaska Department of Transportation and Public Facilities (DOT&PF) and is being prepared in coordination with the development of the Prince William Sound / Copper River Area Transportation Plan. The plan for each region will be developed separately, but coordinated where common issues overlap between the two regions. DOT&PF's goal is for each regional plan to serve as an elaboration of the Statewide Transportation Plan, Vision: 2020, that will focus on identifying projects that, over the life of the plan, will be included in the Statewide Transportation Improvement Program (STIP).

The transportation plan will encompass highway, air, and marine transportation modes. It will contain a set of recommended multi-modal transportation system improvements for addressing needs and improving the movement of people, vehicles and freight between communities within the region, and between the region and the outside world. The plan will focus primarily on commercial transportation and on connections between modes. The plan's recommended improvements will be phased through the year 2020 and accompanied by a range of alternative financial strategies based on different levels of investment. The plan will be used by DOT&PF to guide its decisions regarding operational and capital improvements for the region.

DATA USES

In order to ensure that the data being collected will be useful and effective, it is important to identify what the data will be used for. This section describes intended uses of data.

DEMOGRAPHIC DATA

Demographic data has traditionally been known to have a direct correlation with travel demand. Demographic data collected will be used primarily as a basis to forecast future travel demand.

Population and Employment

Existing population and employment data will be used as a base for disaggregating forecast data into smaller areas. Existing and forecast population and employment data will then be used to develop growth factors by which existing travel demand can be factored up to future demand estimate levels.

Community Characteristics

This data will primarily be used to identify potential travel patterns or needs that are currently not well served.

Visitor Attractions

This data will be used to assist in determining future visitor travel demand and patterns.

DATA ON TRANSPORTATION FACILITIES AND SERVICES

Existing facilities and services which serve regional travel are being inventoried. This data will be used to identify current service levels by mode by community, and to identify existing and future deficiencies.

Marine Transportation

Characteristics of marine facilities are being inventoried, including facility type, capacity and usage fees. Public and private marine travel services are being identified for both passenger and freight movement as applicable. Specific data being gathered includes routing, schedules, rates, and operating costs (if pertinent and as available).

Air Transportation

Characteristics of aviation facilities are being inventoried, including facility type, class, runway surface, length, services and fees. Air carrier services are being identified for both passenger and freight movement as applicable. Specific data being gathered includes routing, schedules, and rates as available.

Land Transportation

There are only four existing inter-community roads and no public bus service or railroad facilities in the Southwest Region. Consequently, there is similarly little data available on surface transportation. Roadway characteristics including facility type, classification and capacity are, however, being inventoried with an emphasis on these four locations:

- Aleknagik - Dillingham
- Newhalen - Iliamna - Nondalton
- Naknek - King Salmon
- Chiniak - Kodiak

Previous planning efforts have identified other surface transportation needs that have not yet been programmed for implementation. These past studies will also be useful in developing potential transportation alternatives.

TRAVEL DEMAND DATA

Existing travel demand data by mode are being gathered from the various service providers and, to the degree possible, broken into three general categories – residents' travel, non-residents' business travel, and visitor travel. Existing freight movements into, out of, and within the region are also being identified by mode. Existing travel demand, for both person and freight movement, will then be factored up to future estimates using growth factors developed from the demographic data and redistributed by estimated future modes.

Personal and Business Travel

This category refers to residents' travel and visitors traveling to a Southwest Alaska destination on business.

Visitor Travel

This category focuses on recreational visitor travel.

Freight Movements

An attempt is being made to differentiate between freight demand related to ongoing regular residents' and local business' needs versus major resource imports/exports (which are frequently seasonal in nature). The type of freight service differs between these two general categories. Scheduled barge service tends to meet residential and local business freight needs, while on-demand freight carriers typically serve the needs of the major resource industries.

GEOGRAPHIC DATA

Geographic data will be used to document existing physical conditions and assess impacts and feasibility of proposed future improvements.

DATA SOURCES

Pertinent sources identified to date for each data category are listed in the attached tables.

DEMOGRAPHIC DATA

See Table 1 for a description of demographic data sources identified, a summary assessment of the data and a determination of its availability.

MARINE TRANSPORTATION

See Table 2 for a description of marine transportation data sources identified, a summary assessment of the data and a determination of its availability.

AIR TRANSPORTATION

See Table 3 for a description of air transportation data sources identified, a summary assessment of the data and a determination of its availability.

LAND TRANSPORTATION

See Table 4 for a description of land transportation data sources identified, a summary assessment of the data and a determination of its availability.

VISITOR DATA

See Table 5 for a description of visitor data sources identified, a summary assessment of the data and a determination of its availability.

GEOGRAPHIC DATA

See Table 6 for a description of geographic data sources identified, a summary assessment of the data and a determination of its availability.

Table 1

**Demographics
Data Availability and Assessment Status
Southwest Alaska Transportation Plan**

	Existing	Historical/Trends	Projections	Comments/Status
Population	Population data are available from the U.S. Department of Commerce, Bureau of the Census and from the Alaska Department of Labor, Research and Analysis Section. The Alaska Department of Labor data include annual population estimates, by community. Regional projections have been obtained for and disaggregate projections at the Borough/Census Area level have been requested.	Regional population projections have been prepared by the University of Alaska, Institute of Social and Economic Research.	Adequate data have been identified.	
Employment	1995 employment data, by Census sub-sub-area and SIC code, have been obtained from the Alaska Department of Labor. 1996 employment data have also been obtained.	Regional employment projections have been prepared by the University of Alaska, Institute of Social and Economic Research.	Adequate data have been identified.	
Community	Community profile data are available from the Alaska Department of Community and Regional Affairs, Research and Analysis Section.			Need to solicit public health network descriptions. Otherwise, adequate data have been identified.
Characteristics				

Table 2

Marine Transportation
Data Availability and Assessment Status
 Southwest Alaska Transportation Plan

	Existing	Historical/Trends	Projections	Comments/Status
Alaska Marine Highway System				
Supply	Data available from AMHS include routings, schedules, financial reports, operating cost and revenue by vessel, and monthly traffic and revenue data by origin-destination pair.	Monthly traffic data by origin-destination pair for the period from May 1988 through April 1997 have been obtained.		Adequate data are available.
Demand		Disaggregate revenue and operating cost data have been requested.		
Passengers				AMHS-carried cargo is also included in Corps of Engineers Water-borne Commerce data.
Freight				
Private Operators*				
Supply	Seven steamship companies and seven barge operators have been contacted to obtain routing, schedules and tariffs. These shippers represent the major support for communities in Prince William Sound and Southwest Alaska.	Information on changes in service levels will be obtained to the extent these data are available. The objective will be to establish historical trends, and future projections, if possible.		Data are available. An interview form is being used for further contact.
Demand				
Passengers	It does not appear that there are any significant existing scheduled private passenger services offered, other than cruise ships.			With the exception of cruise ship data (included in visitor data), no data related to private operators or private vessels have been identified for passenger
Freight	Corps of Engineers Water-borne Commerce data appear to have comprehensive data on import/exports by commodity type by port. Detailed information on CD-ROM.	General historical trends should be available through Corps of Engineers hard copy records.		Continuing review of Corps of Engineers Water-borne Commerce data for O-D information. A custom sort has been requested from the WCSC for link volumes, O-D volumes, commodity distributions and port calls by draft.

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Table 2 (Continued)

**Marine Transportation
Data Availability and Assessment Status
Southwest Alaska Transportation Plan**

	Existing	Historical/Trends	Projections	Comments/Status
Other				
Fishing Vessels	Will research fishing vessel licensing data from State Fisheries to determine applicability.			
Marine Facilities	Several excellent data sources identified --1995 Alaska Harbor & Boating Facilities Directory (DOT&PF); 1996 Ports of Alaska directory (Alaska Business Pub.); Ports of Southwest & Western Alaska, 1995 (COE); Recon of Navigation Improvements, Western and Arctic Coasts, August 1997 (Tryck Nyman Hayes, Inc.). From these sources, comprehensive data available for all pertinent facilities in region including layout of facilities, vessel types accommodated, capacity, fees and operator.			
Type	It appears sufficient marine facility data have been identified.			
Capacity				
Fees				

* Note: Cruise ships recorded in visitor data

Table 3

**Air Transportation
Data Availability and Assessment Status
Southwest Alaska Transportation Plan**

	Existing	Historical/Trends	Projections	Comments/Status
Air Carrier Operations				
Supply	Air carrier routing, schedule and rate information is available.			Adequate demand-side and supply-side data are available.
Demand				
Passengers				
Link Volumes	Categories of data available from USDOT Bureau of Transportation Statistics include 1) Commuter Air Carrier Activity (passenger volumes between hub airports and destinations; trend data available), 2) Statistics of Certified Route Air Carriers (enplaned revenue passengers by certificated route (mainline) air carriers), 3) T100 Market Data (identifies commuter traffic between communities (not O-D specific), and O-D data for mainline carrier passengers), and 4) Airport Master Plans (contain 20 yr. projections of passenger and freight volumes).		Air travel projections from Master Plans will be reviewed for relevancy during travel forecasting stage of project.	
O-D Volumes				
Freight				
Link Volumes	Categories of data available from USDOT Bureau of Transportation Statistics include 1) Commuter Air Carrier Activity (cargo and mail volumes between hub airports and destinations; trend data available), 2) Statistics of Certificated Route Air Carriers (enplaned revenue tons of freight and mail by certificated route (mainline) air carriers), 3) T100 Market Data (identifies commuter carrier mail and freight between communities (not O-D specific), and O-D mail and freight data for mainline carriers), and 4) Airport Master Plans (contain 20 yr. projections of passenger and freight volumes).		Air freight projections from Master Plans will be reviewed for relevancy during travel forecasting stage of project.	
O-D Volumes				
Aviation Facilities				
Facility Type	Data sources identified include the following: DOT&PF Alaska Aviation System Plan; FAA Airport Master Records; FAA Airport Improvement Programs; and DOT&PF Airport Master Plans relocation studies or Environmental Assessments (for 18 of the 53 Southwest AK communities in study area - including 4 borough seats). Combined, these sources contain inventories of all airports in the region listing airport locations, facility type, class, ownership, runway surface, condition & length, services, and based aircraft. Master plans provide information on future facility needs as well as issues associated with airport expansion or improvement. FAA Improvement Programs provide historical data on airport improvements and			Adequate aviation facility data are available.
Class				
Runway Surface				
Length				
Services				
Fees				

Table 4

**Land Transportation
Data Availability and Assessment Status
Southwest Alaska Transportation Plan**

	Existing	Historical/Trends	Projections	Comments/Status
Passengers				
Supply				
Highway				
<i>Public Carriers</i>				
Routing		N/A - no scheduled, inter-community public carrier service exists.		N/A.
Schedules				
Fares				
Demand				
Highway				
<i>Public Carriers</i>				
Link Volumes		N/A.		N/A.
O-D Volumes				
<i>Private Vehicles</i>				
Link Volumes		Vehicular link volume data, by season, is available from DOT&PF counts. O-D volume data are inherently available for single-mode trips due to limited network, inter-modal O-D data are not available.		O-D pattern information will be sought through the travel behavior survey.
O-D Volumes				
Freight				
Supply				
Highway				
Routing				
Schedules				
Rates		Scheduled truck freight service routing and schedule data do not appear to be available, and may not exist.		Desired data do not appear to be available. The effects of this lack of data are being assessed.
Demand				
Highway				
Link Volumes				
O-D Volumes		Vehicular link volume data, by season, is available from DOT&PF counts. O-D volume data do not appear to be available.		Data adequacy has not yet been determined.

Table 4 (Continued)

Land Transportation
Data Availability and Assessment Status
Southwest Alaska Transportation Plan

	Existing	Historical/Trends	Projections	Comments/Status
Land Transportation Facilities Highway Facility Type Classification Capacity	Road facility descriptor data are being obtained from DOT&PF, Central Region. Study area includes four inter-community roads (Aleknagik-Dillingham, Newhalen-Illiamna-Nondalton, King Salmon-Naknek, and Kodiak- Chiniak).			Several previous planning documents provide information on surface transportation conditions and needs in Southwest Alaska, including local TIPs and the STIP. Need projections from the following studies are being reviewed for relevancy to this plan: Alaska Intermodal Transportation Plan (covers Bristol Bay Haul Rd. and Cold Bay-King Cove connection), Lake and Peninsula Borough Intra-Village Road Project Priorities (covers Pile Bay Rd. and Chignik Inter-village system), Aleutian and Southwest Alaska Multimodal Transportation Study and the Bristol Bay/Upper Kuskokwim Area Transportation Needs Assessment Report (both are useful in establishing trends and historic baseline),

Table 5

Visitor Travel

Data Availability and Assessment Status
Southwest Alaska Transportation Plan

	Existing	Historical/Trends	Projections	Comments/Status
Marine Cruise Ships AMHS Air Surface Highway	<p>Data sources identified for visitor data include:</p> <ol style="list-style-type: none"> 1) <u>Alaska Department of Natural Resources</u>. a) <i>Division of Lands</i> - issues permits for commercial use of state land. Records are available on the number of permits issued annually, plus each permit holder is required to submit an annual report documenting number of users. b) <i>Division of Parks</i> - maintains rough records of use of State Parks, such as Wood-Tikchik; and use of State public use cabins. Approximately every 5 years State Parks also conducts statewide recreation survey (SCORP). The next such survey is scheduled to be done in the coming year. 2) <u>Alaska Department of Fish and Game</u>. a) Detailed annual surveys of sportfishing and hunting activity by management district b) Estimates of visitation to select state game refuges and sanctuaries (e.g., Walrus Island). c) Locations, changes in numbers of setnet sites 3) <u>Federal Land Managers</u> a) Annual visitation at National Parks/National Wildlife Refuges (e.g., Katmai, Lake Clark). For certain specific destinations records are kept about visitor activities and characteristics. b) Numbers and trends in commercial use permits. 			<p>While considerable visitor information is available, out-of-state visitor data, in particular, is increasingly out-of-date.</p> <p>Visitor travel modes and O-D patterns will be inferred from facility/vehicle volumes and site visitation data.</p>
Marine Cruise Ships AMHS	<p>4) Information is available and being sought on the stated intentions of cruise company service expansions in Alaska. Projections will be backed up by market evaluations of national and international trends in demand for cruise ship travel.</p>			

Table 5 (Continued)

Visitor Travel
Data Availability and Assessment Status
Southwest Alaska Transportation Plan

	Existing	Historical/Trends	Projections	Comments/Status
Marine Cruise Ships AMHS Air Surface Highway		<p>5) <i>Southwest Alaska Municipal Conference</i> (SWAMC) and the <i>Alaska Dept. of Commerce and Economic Development</i> - recently completed the <i>Rural Alaska Tourism Infrastructure Needs Assessment</i> which provides a general description of the primary tourism attributes, current visitation, potential for development, challenges to tourism development, tourism organizations, a listing of priority infrastructure development projects and other additional projects for the Aleutian and Pribilof Islands, Kodiak Island Borough, Bristol Bay and the Alaska Peninsula.</p> <p>6) <u>Other Sources of Tourism Information</u></p> <p>a) Several destinations maintain records of visitation, such as the King Salmon Visitor Center, Dillingham Chamber of Commerce, Kodiak Alutiiq Museum, and Unalaska Convention and Visitors Bureau.</p> <p>b) Alaska Village Initiatives - recently completed statewide survey of rural/Native-owned tourism businesses.</p> <p>c) Recently established taxes on tourism activity will begin to establish records of visitor activity, such as Unalaska's local bed tax.</p> <p>d) Consultant reports on tourism activities and trends, including work done for Bristol Bay Native Association, and Bristol Bay Native Corporation.</p> <p>7) <u>General Trends in Statewide/International Tourism</u></p> <p>Trade and marketing groups within Alaska, such as the Alaska Visitors Association (AVA), Alaska Wilderness Recreation and Tourism Association (AWRTA) and the Alaska Tourism Marketing Council (ATMC) have conducted recent studies of tourism trends. In addition, a large literature exists documenting national and international trends in traveler behavior, preferences and spending.</p>		

Table 6

Geographic Data
Data Availability and Assessment Status
Southwest Alaska Transportation Plan
Existing

Relevant data sources identified for this study include the following Geographic Information System (GIS) data:

- 1) *Alaska Department of Natural Resources (DNR) GIS Data* (have obtained data sets for the following: Alaska Coastline; Canadian Coastline; Coastline of former Soviet Far East; Major Rivers; Rivers; Lakes greater than 20 acres; Glaciers; Hypsography; Populated Places; Iditarod Trail; Railroads; Roads; Trans-Alaska Pipeline; 1994 Election District Boundaries; Borough Boundaries; Recording District Boundaries; ANCSA Corporation Boundaries; REAA Boundaries; Historic Transportation Routes (RS2477); Conservation System Unit Boundaries (ARC 7.0 coverage); and Legislatively Designated Areas);
- 2) *Alaska Aviation System Plan Database* (have obtained an Excel spreadsheet of the information contained in the Alaska Aviation System Plan Update. Based on the latitude and longitude contained in the spreadsheet, a variety of facility data for the airports contained in the inventory can be mapped.)
- 3) *NOAA charts* - raster-based GIS mapping is available. Data could be obtained for use in developing detailed marine alternatives for the plan, however the data doesn't appear to be necessary in developing presentation maps.

It appears that the mapping data available are sufficient for the needs of the study.

ADDITIONAL DATA NEEDS

The data inventory has determined the availability and adequacy of the data necessary to complete the Southwest Alaska Transportation Plan. In general, the data which has been identified as available is sufficient for the purposes of this project. Further data collection will consist of obtaining and compiling existing available data. No field data collection has been deemed necessary. The following lists specific data, if any, which need to be obtained by each data category.

DEMOGRAPHICS

Adequate data related to population, employment and community characteristics have been identified, are available and have been obtained.

MARINE TRANSPORTATION

Adequate data on the Alaska Marine Highway System (AMHS) have been identified and are available for both passenger and freight movements. The extent of marine freight movement data, both existing and historical, contained in the Army Corps of Engineers Water-Borne Commerce CD ROM is still being investigated. If the data on the CD ROM is not sufficient for study needs, the Army Corps has indicated that they can provide a custom sort of the raw data by request. The extent of the sorting capabilities are currently being investigated. A custom sort has been requested.

Additional information is being sought on private operators providing goods movement for residents and local businesses. It is assumed that much of this service is provided through scheduled barge service. Several steamship and barge operators have been contacted to obtain information on their routing, schedules and rates.

Adequate information regarding marine facilities has been identified, is available and has been obtained.

AIR TRANSPORTATION

Adequate data related to air carrier operations, for both passengers and freight, as well as aviation facilities have been identified and are available.

LAND TRANSPORTATION

General Purpose

Regarding roadway travel demand, data on public carrier passenger volumes is being sought and the adequacy of this data is still unknown. For private vehicles, link data by season is available, but origin-destination (O-D) data is not. Information on O-D patterns will be sought through the travel behavior survey.

Freight

For freight service, data on scheduled truck freight service routing and schedules does not appear to be available, although rate data is. The effects of this lack of data on the study process are being assessed.

O-D freight volume data for roadways does not appear to be available.

Facility Description

It appears that roadway facility descriptor data are available.

VISITOR DATA

Various sources of visitor travel data in the Southwest Alaska region have been identified. These sources are being further investigated to determine the extent of the data.

GEOGRAPHIC DATA

Adequate geographic data has been identified and is available.

BIBLIOGRAPHY

PRIMARY SOURCES

The following lists briefly annotated references containing information which will be of direct and primary use in the development of the Southwest Alaska Transportation Plan:

Alaska Business Publishing. 1996 Ports of Alaska Directory.

Contains technical data and maps on Southwest Alaska ports. Data varies by port and is not comprehensive.

Alaska Department of Transportation and Public Facilities. Alaska Aviation System Plan. 1996.

Important information on the Southwest aviation system is available from the Alaska Aviation System Plan. Presented in the appendix to the plan is an inventory of all airports in the Southwest Alaska area (public and private) (local, state, and federally managed), documenting the following features of each airport in the region. The following information can be found in the plan:

1. *Airport locations*
2. *Facility Types*
3. *DOT&PF Class*
4. *Ownership (Entity)*
5. *Ownership (Public-Private)*
6. *Runway Surface*
7. *Runway Condition*
8. *Runway Length*

Alaska Department of Transportation and Public Facilities. Alaska Intermodal Transportation Plan. 1995.

Provides description of waterborne, air, and land transportation networks and an intermodal project evaluation methodology; overviews of DOT&PF planning, intermodal system improvement needs, State policies; identifies financing, policy and physical improvement opportunities; and includes recommendations for implementing the plan.

Alaska Department of Transportation and Public Facilities. Chignik Lagoon Airport Master Plan. 1991.

Alaska Department of Transportation and Public Facilities. Egegik Airport Master Plan. 1992.

Alaska Department of Transportation and Public Facilities. New Koliganek Airport Master Plan. 1993.

Alaska Department of Transportation and Public Facilities. Port Alsworth Airport Master Plan. 1992.

Alaska Department of Transportation and Public Facilities. St. Paul Airport Master Plan. 1992.

Master Plans provide an inventory of airport services and facilities as well as historic and projected use data for passengers, aircraft operations, and freight volumes. Future facility needs and requirements are identified.

Alaska Department of Transportation and Public Facilities, Central Region Planning, Highway Data Section. Central Region Traffic Volume Report 1994, 1995, and 1996.

Includes information on traffic volumes (annual average daily traffic (AADT)), vehicle classification counts, and weigh-in-motion (WIM) data on commercial size vehicles (not included in report, but available on request and through the Internet at 146.63.95.10/ftp).

Alaska Department of Transportation and Public Facilities, Harbors Section. 1995 Alaska Harbor and Boating Facilities Directory.

Includes comprehensive current information on facility location, layout, capacity, services, and fees.

Alaska Department of Transportation and Public Facilities, Marine Highway System. 1994 Annual Financial Report.

Alaska Department of Transportation and Public Facilities, Marine Highway System. 1995 Annual Financial Report.

Alaska Department of Transportation and Public Facilities, Marine Highway System. 1996 Annual Financial Report.

Provide data on revenue and expenditures by vessel.

Alaska Department of Transportation and Public Facilities, Marine Highway System. 1994 Annual Traffic Volume Report. March 1995

Alaska Department of Transportation and Public Facilities, Marine Highway System. 1995 Annual Traffic Volume Report. March 1996

Alaska Department of Transportation and Public Facilities, Marine Highway System. 1996 Annual Traffic Volume Report. March 1997

Reports provide data on passengers and vehicles embarking and disembarking by month, port and vessel, on passengers and vehicles by port origin and destination pair by vessel, and on passenger and vehicle link volumes by vessel.

Alaska Department of Transportation and Public Facilities, Marine Highway System. 1992-93 Fall, Winter, Spring Schedule

Alaska Department of Transportation and Public Facilities, Marine Highway System. 1993 Summer Schedule

Alaska Department of Transportation and Public Facilities, Marine Highway System. 1993-1994 Fall, Winter, Spring Schedule

Alaska Department of Transportation and Public Facilities, Marine Highway System. 1994 Summer Schedule

Alaska Department of Transportation and Public Facilities, Marine Highway System. 1994-1995 Fall, Winter, Spring Schedule

Alaska Department of Transportation and Public Facilities, Marine Highway System. 1995 Spring, Summer Schedule

Alaska Department of Transportation and Public Facilities, Marine Highway System. 1995-96 Fall, Winter, Spring Schedule

Alaska Department of Transportation and Public Facilities, Marine Highway System. 1996 Summer Schedule

Alaska Department of Transportation and Public Facilities, Marine Highway System. 1996-97 Fall, Winter, Spring Schedule

Schedules provide data on routings, numbers of port calls, running times, and tariffs.

Lake and Peninsula Borough. Lake and Peninsula Borough Intra-Village Road Project Priorities. 1993.

Provides project descriptions, justification, and preliminary cost estimates for local road projects in the borough. Includes economic and traffic data analysis for the Iliamna Lake Scenic Highway, Iliamna-Nondalton and Chignik inter-village road systems.

Southwest Alaska Municipal Conference and Alaska Department of Commerce and Economic Development, Divisions of Trade and Development and Tourism. Rural Alaska Tourism Infrastructure Needs Assessment. 1997.

Includes three volumes pertinent to study area: Aleutian and Pribilof Islands, Kodiak Island Borough, and Bristol Bay and Alaska Peninsula. Each volume provides a general description of the area's access, primary tourism attributes, current visitation, potentials for development, challenges to tourism development, tourism organizations, listing of priority infrastructure development projects, listing of other additional projects, and a brief regional "snapshot."

US Army Corps of Engineers. The Ports of Southwest and Western Alaska. 1995.

Comprehensive data on major ports in the region including Dillingham, Dutch Harbor, and Kodiak.

US Army Corps of Engineers, Waterborne Commerce Statistics Center. Waterborne Commerce of the United States.

The Waterborne Commerce Statistics Center maintains a comprehensive database of marine freight data collected from shippers. However, due to confidentiality agreements with the shippers, release of this data is restricted.

US Army Corps of Engineers, Waterborne Commerce Statistics Center. W United States Waterway Data CD-ROM.

Contains data from the Army Corps of Engineers Navigation Data Center, the US Bureau of Census, the United States Coast Guard, Oak ridge National Laboratories and Vanderbilt University..

US Department of Transportation. Federal Aviation Administration. Airport Master Records.

FAA's Airport Master Records (form 5010s) contain important airport information for every airport in Southwest Alaska. The master records often include more current information that has been updated since the AASP inventory was conducted. Information on services, based aircraft, operations, facilities, runway data, lighting, obstructions, landing length, and airport ownership is provided in the airport master records. All of the airport master records for Southwest Alaska have been collected.

US Department of Transportation. Federal Aviation Administration. Alaska Region Airport Improvement Program FY 1982 - FY 1996 .

Provides a history (project description and cost) of airport improvements between 1982 and 1996.

US Department of Transportation. Federal Aviation Administration. FFY '98 Draft Alaska Airport Improvement Program.

Indicates projects funded for the 1998 fiscal year.

US Department of Transportation. Federal Aviation Administration. Bureau of Transportation Statistics. Airport Activity Statistics of Certificated Route Air Carriers. 1990-96.

Enplaned revenue passengers and enplaned revenue tons of freight and mail carried by certificated route air carriers (mainline carriers) is provided from these reports.

US Department of Transportation. Federal Aviation Administration. Bureau of Transportation Statistics. Commuter Air Carrier Activity. 1990-96.

Commuter air carrier activity for hub airports summarizes the volume of passengers, cargo, and mail between the hub airport and the destination facilities. Trend information for the hub airports will be included in the technical discussion memo.

US Department of Transportation. Federal Aviation Administration. Bureau of Transportation Statistics. T-100 Market Data. 1990-96.

Commuter and mainline carriers data is available for both origin and destination. Commuter information indicates the passengers, mail, and freight that moved between communities, but is not origin-destination specific. Data for mainline carriers (certificated) indicates the origin and destination of passengers, mail, and freight. T100 market data will be collected for the most recent full year of data available. This information will be used to document the system flow, and will be used to map where, and how much is (passengers and freight) moving between communities.

SECONDARY SOURCES

The following references are available and may provide additional information to be used in the development of the Southwest Alaska Transportation Plan:

Alaska Aviation Consultants. Dillingham City Airstrip, Close or Upgrade?: A Cost Analysis. 1977.

Alaska Department of Community and Regional Affairs (Tryck Nyman Hayes, Inc.). Adak Reuse Plan. November, 1996.

Alaska Department of Community and Regional Affairs. Akutan, Prospects for Development. September 1983.

Alaska Department of Community and Regional Affairs (TAMS Engineers). Bristol Bay Development Study, Summary Report. March 1985. (HDR Library).

Alaska Department of Community and Regional Affairs (Dames & Moore). Bristol Bay Underdeveloped Commercial Fisheries Potential: Final Report. 1984.

Alaska Department of Community and Regional Affairs. DCRA Report On The Proposed Incorporation of Pilot Point. September, 1991.

Alaska Department of Community and Regional Affairs (Kane, Gene). Final Report of the Department of Community and Regional Affairs to the Local Boundary Commission regarding Reconsideration of Legal Limits for Incorporation of the City of Pilot Point. March 18, 1997.

Alaska Department of Community and Regional Affairs (Woodward-Clyde Consultants). Oil Terminal and Marine Service Base Sites in the Kodiak Island Borough: Final Report. 1977.

Alaska Department of Community & Regional Affairs (Tremont, Dave). Twin Hills Advisory Land Use Plan. May 1984.

Alaska Department of Fish and Game (Schwarz, Len J). 1993 area management report for the recreational fisheries of the Kodiak and Alaska. July 1994.

Alaska Department of Fish and Game (Minard, R. Eric). 1994 Area Management Report for the Recreational Fisheries of the Southwest Alaska Sport Fish. 1995.

Alaska Department of Fish and Game (Schichnes, Janet). Contemporary Use of Fish and Wildlife in Ekwok, Koliganek, and New Stuyahok, Alaska. October, 1992.

Alaska Department of Fish and Game (Fall, James A). Fish and Wildlife Harvests in Pilot Point, Ugashik and Port Heiden, Alaska Peninsula, 1986-1987. November 1987.

Alaska Department of Fish and Game (Morris, Judith M.). Fish and wildlife uses in six Alaska Peninsula Communities : Egegik, Chignik, Chignik Lagoon et al. August 1987.

Alaska Department of Fish and Game (James A. Fall et al.) An Overview of the Harvest and use of Freshwater Fish by the Communities of the Bristol Bay Region, Southwest Alaska. 1996.

Alaska Department of Fish and Game (Morris, Judith M.). The Use of Fish and Wildlife Resources by Residents of the Bristol Bay Borough. December 1985.

Alaska Department of Highways, Engineering Geology Section. Centerline materials investigation: Pillar Creek to Monashka Creek. July 1971.

Alaska Department of Highways. Centerline and Materials Site Investigation, Project NAS Boundary to FAS 391 ... and FAP II to Woman's Bay. February 1973.

Alaska Department of Highways. Final Environmental Impact Statement for Kodiak Naval Air Station Highway Improvement: projects S-0391(4). 1971.

Alaska Department of Highways (DeLeuw, Cather & Associates and Tryck, Nyman & Hayes). Kodiak - Mill Bay Road Corridor Engineering Study. February 1971.

Alaska Department of Highways. Kodiak to Mill Bay : Final Environmental Impact Statement, project S-0389(4), code B 40222. 1971.

Alaska Department of Highways (Harp, Marvin G). Material Site Report Anton Larsen Bay Road. September 1969.

Alaska Department of Highways. Materials Investigation, Mill Bay Road (Kodiak) : project number S-0389(3), Anchorage District. February 1968.

Alaska Department of Highways. Material Site Report, Naknek-King Salmon. June 1972.

Alaska Department of Highways Engineering Geology Section, Materials Division. Mill Bay Road Extension. April 1973.

Alaska Department of Highways Engineering Geology Section, Materials Division. N.A.S. Kodiak - Bruhn. March 1972.

Alaska Department of Highways. Port Wakefield to Port Lions Airport. February 1972.

Alaska Department of Highways, Engineering Geology Section, Materials Division. Supplement to Dillingham-Kanakanak. 1976.

Alaska Department of Highways, Materials Section. Supplemental Materials Investigation, Dillingham -Aleknagik: project number S-0411(4). January 1968.

Alaska Department of Highways. Supplemental Materials Report: Cape Chiniak Road, Kodiak Island. 1968.

Alaska Department of Highways. Transportation Impacts of Outer Continental Shelf Oil and Gas Development in the Northern Gulf of Alaska and Kodiak Areas: synopsis. 1976.

Alaska Department of Natural Resources, Department of Fish and Game, Department of Environmental Conservation. Bristol Bay Area Plan for State Lands. 1984.

Alaska Department of Natural Resources. An Ethnohistory of the Kvichak River Area and Lakes of the Upper Alaska Peninsula. October 1980.

Alaska Department of Public Works (Kelly Pittelko Fritz and Forssen Consulting Engineers) Cold Bay Timber Wharf and Approachway Findings of Inspection of June 1-2, 1971. June 25, 1971.

Alaska Department of Public Works (Lovelady, Frank D.). Cold Bay Airport Economic Profile. 1973.

Alaska Department of Public Works, Division of Aviation (Dames & Moore). Specifications Criteria for Master Lease, Commercial Wharf Facility, Cold Bay, Alaska. 1973.

Alaska Department of Transportation and Public Facilities. 1982 Alaska Peninsula & Aleutian/Pribilof Islands Area Transportation Needs Assessment Report. 1982.

Alaska Department of Transportation and Public Facilities. 1982 Kodiak Island Area Transportation Needs Assessment Report. 1982.

Alaska Department of Transportation and Public Facilities. Agreement Between the State of Alaska Operating the Alaska Marine Highway System and Inlandboatmen's. 1991.

Alaska Department of Transportation and Public Facilities (Bivens and Assoc., Inc.). Alaska Statewide Rail Systems Study. December 1980.

Alaska Department of Transportation and Public Facilities (Wilbur Smith and Assoc.) Alaska State Rail Plan. 1985.

Alaska Department of Transportation and Public Facilities. Aleutian Coastal Ferry Study. 1978 (Note: "This is a preliminary report on the initial phase of the Aleutian Coastal Ferry Study mandated and funded by the Alaska State Legislature in 1977.")

Alaska Department of Transportation and Public Facilities. Aleutian Coastal Ferry Study: Preliminary Report. 1978.

Alaska Department of Transportation & Public Facilities (DMJM). Aleutian and Southwest Alaska Coastal Ferry Study: Executive Summary. 1980.

Alaska Department of Transportation and Public Facilities (DMJM). Aleutian and Southwest Alaska Multi Modal Transportation Study: Technical Report. 1980.

Alaska Department of Transportation and Public Facilities. Aleutians and Southwest Alaska Multimodal Transportation Study - Summary. 1984.

Alaska Department of Transportation and Public Facilities. Atka Reconnaissance and Feasibility for Airport Construction. 1978.

Alaska Department of Transportation & Public Facilities (DMJM). Beach Road Location Study, Bristol Bay Borough. 1982.

Alaska Department of Transportation & Public Facilities (Wood, Bruce E.). Bristol Bay/Upper Kuskokwim transportation needs. September, 1982.

Alaska Department of Transportation & Public Facilities (Harp, Marvin G.). Centerline soils investigation, Unalaska Bridge. February, 1978.

Alaska Department of Transportation and Public Facilities (FAA). Chignik Airport Resurfacing: EA and FONSI - project no.59077. July 1992.

Alaska Department of Transportation and Public Facilities. Cold Bay Airport Economic Profile. 1973.

Alaska Department of Transportation and Public Facilities. Cold Bay Airport Master Plan. 1988.

Alaska Department of Transportation and Public Facilities (TRA/Farr). Dillingham Airport Master Plan. 1986.

Alaska Department of Transportation & Public Facilities. Ekwok Airport Materials Investigation. May 1983.

Alaska Department of Transportation and Public Facilities (FAA). Environmental Assessment Pedro Bay Airport Improvements. May 1995.

Alaska Department of Transportation & Public Facilities (Bomhoff & Associates Inc.). Feasibility study, St. George small boat harbor and drystorage area. 198?.

Alaska Department of Transportation and Public Facilities & U.S. Army Corps of Engineers. Harbor Inventory and Condition Survey. February 1993.

Alaska Department of Transportation and Public Facilities. Igiugig Airport improvements: EA - project no.59192. April 1993.

Alaska Department of Transportation and Public Facilities. Inventory and condition survey of public facilities, Southwest region, Alaska. 1980.

Alaska Energy Authority. King Cove hydroelectric project: feasibility study. 1991

Alaska Department of Transportation and Public Facilities. King Salmon Airport Master Plan. 1987.

Alaska Department of Transportation and Public Facilities. King Salmon Airport Operating Plan June 2-July 31, 1980. March 1980.

Alaska Department of Transportation and Public Facilities. King Salmon East Apron Materials Investigation. March 1982.

Alaska Department of Transportation and Public Facilities. Kodiak Airport Master Plan. 1986.

Alaska Department of Transportation and Public Facilities (Roen/Bell-Walker Engineers). Kodiak Municipal Airport Study. 1986.

Alaska Department of Transportation & Public Facilities (DeLeuw, Cather & Company). Kodiak Roadway Master Plan. 1986.

Alaska Department of Transportation & Public Facilities (Ottley, Tom). Kokhanok Materials Investigation. March 1984.

Alaska Department of Transportation & Public Facilities. Iliamna Apron and Access Road Soils Investigation. May 1984.

Alaska Department of Transportation & Public Facilities (DMJM). Naknek Bridge Location Study: Executive Summary. July 1983.

Alaska Department of Transportation & Public Facilities (DMJM). Naknek Bridge Location Study: Report. July 1983.

Alaska Department of Transportation & Public Facilities (B & B Environmental, Inc.). New Koliganek Airport Relocation Study: Site Selection Document and Scoping Summary Report. March 27, 1992.

Alaska Department of Transportation and Public Facilities. New Koliganek Airport Relocation Study. 1992.

Alaska Department of Transportation & Public Facilities (B & B Environmental, Inc). New Koliganek Airport Relocation: Environmental Assessment. May 1993.

Alaska Department of Transportation & Public Facilities. Nondalton-Newhalen/Iliamna Pioneer Road Economic Feasibility Study. March 1986.

Alaska OCS Social and Economic Studies Program. North Aleutian Basin Transportation Methodology. 1984.

Alaska Department of Transportation and Public Facilities (FAA). Old Harbor Airport Relocation: EA and FONSI - project no.53263. July 1992.

Alaska Department of Transportation & Public Facilities. Port Lions Airport: Materials Investigation. May 1983.

Alaska Department of Transportation & Public Facilities. Portage Creek Airfield Materials Investigation. August 1984.

Alaska Department of Transportation & Public Facilities. Potential Ports and Harbors Development Projects in Southwest Alaska. 1983.

Alaska Department of Transportation & Public Facilities (Dames & Moore). Pribilof Islands Transportation Study. September 1982.

Alaska Department of Transportation & Public Facilities (Dames & Moore). Pribilof Islands Transportation Study: Executive Summary. September 1982.

Alaska Department of Transportation and Public Facilities. Proposed Unalaska Bridge Crossing: Location and Design Public Hearing Transcript. 1977.

Alaska Department of Transportation and Public Facilities (Unwin, Scheben, Korynta, Huettl, Inc.). Runway Realignment/extension Study at Sand Point Airport, Alaska. May 1982.

Alaska Department of Transportation & Public Facilities (B & B Environmental, and Jon Isaacs and Assoc). Sand Point Airport Improvements, project no. 59027: Reevaluation. December, 1991.

Alaska Department of Transportation & Public Facilities (B & B Environmental, et al.). Environmental assessment, Sand Point Airport: City of Sand Point, Sand Point, Alaska. August 16, 1990.

Alaska Department of Transportation and Public Facilities, Mapping Section. State Highway System Map, King Salmon Maintenance Station. 1979. (Map based on uncontrolled aerial photography flown 1972.)

Alaska Department of Transportation & Public Facilities (Dames & Moore). St. George Harbor Development Plan. January 1982.

Alaska Department of Transportation and Public Facilities (Wahl, John, Transportation Consultant). St. Paul Airport Study. December 1982.

Alaska Department of Transportation and Public Facilities. Sand Point Socioeconomic Forecast and Airport Demand. 1986.

Alaska Department of Transportation and Public Facilities. St. George Airport EA and FONSI. February 1989.

Alaska Department of Transportation and Public Facilities (Dames & Moore). Unalaska Airport - Offshore Runway Extension: Site, Design, and Cost Studies for Feasibility Assessment. 1980.

Alaska Department of Transportation and Public Facilities. Unalaska Airport Master Plan. 1982.

Alaska Energy Authority (Tryck Nyman Hayes Inc). Rural Alaska Bulk Fuel Assessment Program 1991-1992. November 1991-March 1992.

Alaska OCS Social and Economic Studies Program. Social Indicators Study of Alaskan Coastal Villages: IV Postspill Key Informant Summaries. 1993.

Alaska Power Authority. Reconnaissance Study of Energy Requirements and Alternatives. July 1982. v. [1] Main report -- v. [2] Aniak -- v. [3] Atka --v. [4] Chefornak -- v. [5] Chignik Lake

Alaska Power Authority (Denig-Chakroff, Dave). Unalaska/Dutch Harbor Reconnaissance Study: Findings and Recommendations. 1985.

Alaska State Housing Authority. City of Dillingham Comprehensive Plan. 1971.

Aleutians East Borough (Ott Engineering, Inc.) Additional Cold Bay Dock Modification Options for the Aleutians East Borough Dock and Marine Industrial Facility Feasibility Study. October 1989.

Aleutians East Borough (Ott Engineering, Inc.) Aleutians East Borough Dock and Marine Industrial Facility Feasibility Analysis Interim Report. April 1989.

Aleutians East Borough. Aleutians East Borough: A Prospectus for the Future. n.d.

Aleutians East Borough (HDR Engineering, Inc.) Aleutians East Borough Transportation Improvement Plan. November 1993.

Aleutians East Borough. Aleutians East Borough Wave Study, Akutan, Alaska, 1995/1996. 1996.

Aleutians East Coastal Resource Service Area (Resource Analysts). Aleutians East Coastal Resource Service Area Conceptually Approved Coastal Management Plan, Volume I. July 1985.

Aleutians West Coastal Resource Service Area (Resource Analysts). Aleutians West Coastal Resource Service Area Volume II Resource Inventory and Analysis. March 1990.

Aleutians West Coastal Resource Service Area (Resource Analysts). Aleutians West Coastal Resource Service Area Volume III Coastal Management Plan. March 1990.

Aleutians East Coastal Resource Service Area (Resource Analysts). An Analysis of Potential Development and Environmental Sensitivity in the Aleutians East CRSA. Volume III, April 1984.

Aleutians East Coastal Resource Service Area (Golder Associates). Natural Resource Inventory and Analysis: Aleutians East Region, Alaska. July 1983.

Arctic Environmental Information and Data Center. Kodiak Community College: A Study of the Area Served Including Transportation, Economy, Population Characteristics, and Education. 1979.

Bristol Bay Borough. Bristol Bay Borough Comprehensive Plan. September 1985.

Bristol Bay Borough (Bomhoff & Associates) Bristol Bay Dock Study. July, 1978.

Bristol Bay Borough (Kramer, Chin & Mayo). Coastal Management Program Description, Alaska Coastal Management Program, Bristol Bay Borough. 1993.

Bristol Bay Borough (Kramer, Chin & Mayo). Kodiak Island Borough Regional Plan and Development Strategy. Study element 4, Transportation. Working paper B. November 23, 1977.

Bristol Bay Borough (Kramer, Chin & Mayo). Public Dock Support Facility Assessment Study, Bristol Bay Borough: Final Report. 1984

Bristol Bay Coastal Resource Service Area Board. Bristol Bay Coastal Management Program. May 1986-v.1. June 1987- v.2.

Bristol Bay Coastal Resource Service Area Board. Bristol Bay Coastal Management Program. 1992.

Bristol Bay Native Association (Beck, Patty). The Villages of Bristol Bay and their Development Priorities. 1980.

Bristol Bay Native Association. Bristol Bay, An Overall Economic Development Plan. 1976.

Bureau of Land Management. Western Alaska Local Socioeconomic Systems Analysis. Alaska OCS Socioeconomic Studies Program. January, 1982.

Chignik Regional Planning Team. Chignik Regional Comprehensive Salmon Plan, 1992-2001. June 1993.

City of Akutan. City of Akutan Comprehensive Plan. 1982.

City of Cold Bay (Ott Engineering, Inc.). City of Cold Bay Comprehensive Plan. June 1990.

City of Dillingham (Galliett, Harold H.). Feasibility Report on an All-Tide, Medium-Draft, Regional Port for Dillingham, Alaska. 15 June 1979, revised 5 August 1979.

City of Dillingham (Tryck, Nyman & Hayes). City of Dillingham Comprehensive Plan. 1985.

City of King Cove. City of King Cove Community Comprehensive Plan. 1981.

City of Kodiak (Ward, Davis, Dixon). Report of Geotechnical Studies, Container Wharf Bulkhead, Kodiak, Alaska. 1978.

City of Old Harbor. Comprehensive Plan and Capital Improvements Program, Public Hearing Draft. June 1989.

City of Port Lions and the Kodiak Island Borough. The Port Lions Comprehensive Development Plan. 1982.

City of Sand Point (Jon Isaacs and Associates, et al.). Sand Point Socioeconomic Forecast and Airport Demand. October 28, 1986.

City of Sand Point (R&M Consultants & TAMS Alaska). Sand Point Harbor Master Plan. December 1, 1981.

City of Saint George. Port of Saint George: Information Packet. December 1987.

City of St. Paul (OBEC Consulting Engineers). Ataqan Akun Community Plan: City of St. Paul, Alaska. 1995.

City of St. Paul, Pribilof Islands. Draft Community Infrastructure & Bulk Fuel Assessment. May 31, 1983.

City of St. Paul, Pribilof Islands. Draft Community Infrastructure & Bulk Fuel Assessment Appendix. May 31, 1983.

City of Unalaska (HDR Engineering, Inc.) Unalaska Transportation Improvement Program. July 18, 1994.

City of Unalaska (Heery International, Inc.). City of Unalaska Capital Improvement Program FY95 - FY97. January 1994.

City of Unalaska (Jon Isaacs and Associates.) Unalaska Harbor Management Plan: Planning, Management, and Permitting Guidelines. December 1993.

City of Unalaska (Tryck, Nyman and Hayes). City of Unalaska, Alaska Recommended Community Development Plan. 1977.

City of Unalaska. Aleutian Regional Airport Project Documentation. February 1982.

Cook, Linda A. (Unalaska Historic Preservation Commission). Historic Mooring and Dock Sites, Unalaska, Alaska. August 30, 1993.

Crayton, Wayne M. (U.S. Fish and Wildlife Service). Environmental Assessment of Proposed Dredging and Disposal Activities at the St. George Small Boat Harbor, Reconnaissance Stage: Planning Aid Report. December, 1984.

Crooks and Carras. Report on Findings of Preliminary Planning Study, Cold Bay, Alaska, Waterfront Operational Facilities. 1971.

Dames & Moore. St. George Harbor Baseline Studies. January 1982.

Federal Aviation Administration (Alaska Division of Aviation). Chignik, Alaska Environmental Impact Statement. October 9, 1973 (EIS 731648.)

Federal Aviation Administration. Chignik Lake, Alaska: Final Environmental Impact Statement. 1971.

Federal Aviation Administration. Dillingham Airport project: Construction of an extension to the runway extension - Final EIS. 1972.

Federal Aviation Administration and Alaska Department of Transportation and Public Facilities (USKH, Inc). Egegik Airport preliminary EA - Egegik Airport, AK. December 5, 1991.

Federal Aviation Administration (Alaska Division of Aviation). Establishment of Airport, Nelson Lagoon, AK. 1978.

Federal Aviation Administration. Final EIS Akhiok Airport - Akhiok, Alaska. 1977.

Federal Aviation Administration (U.S. Department of Commerce, National Ocean Service). Dillingham Airport, Dillingham, Alaska: digitized from OC 5166, surveyed June 1991,. 1992.

Federal Aviation Administration (U.S. Department of Commerce, National Ocean Service). Unalaska Airport, Unalaska, Alaska: digitized from OC 6367 surveyed August 1987, 1st edition. 1987.

Federal-State Land Use Planning Commission for Alaska. Transportation and Development of Alaska Natural Resources. March 1978.

Galliett, Harold H.. Port and Vessel Study: Extension of the Marine Highway System. 1976.

Hansen, S.E. Tacoma to Anchorage and Kodiak via Inside Passage (Pilot guides). 1917.

Institute of Social and Economic Research (Gray, John T.). Transportation System Planning for Alaska. November 30, 1979.

Institute of Social and Economic Research (Knapp, Gunnar). Economic and Demographic Systems Analysis: Unalaska and Cold Bay, Alaska: Final Technical Report. 1990. Technical report; no. 145. OCS study

Institute of Social and Economic Research, University of Alaska (Nebesky, William E. et al.). Economic, Subsistence, and Sociocultural Projections in the Bristol Bay Region. January 1983.

Kodiak Island Borough, Community Development Department. Kodiak Island Borough Coastal Management Program Concept Approved Draft. June 1983.

Kodiak Island Borough, Community Development Department. Kodiak Island Borough Coastal Management Program Concept Approved Draft. June 1988. Reprint incorporating addendum #1.. Originally published: June 1983.

Naval Operating Base, Kodiak, Alaska. Report and Plans 1940, 1984. (Note: The collection consists of a copy of the report nominating the Kodiak Naval Operating Base and forts Greely and Abercrombie for inclusion in the National Register of Historic Places. The Kodiak Naval Operating Base included a naval air station with facilities for both land and sea planes, a submarine base, and other services. The base was made a historic landmark and included in the Historic American Buildings Survey in 1988.)

Norgaard (USA) Inc. et al.. Business & Economic Development Plan for St. Paul Harbor & Related Operations. February 1983.

Peratovich, Nottingham & Drage, Inc.. Saint George harbor and dock. 1986.

S & S Engineers. Feasibility Study for a Breakwater and Small Boat Harbor at Iliamna, Alaska. 1982.

U.S. Army Corps of Engineers. Chignik, Alaska Small Boat Harbor Project, Expanded Reconnaissance Phase. September 1983.

U.S. Army Corps of Engineers. Chignik, Alaska, Small Boat Harbor: Final Detailed Project Report and Environmental Impact Statement. January 1988.

U.S. Army Corps of Engineers. Chignik, Alaska, Small Boat Harbor : Interim Feasibility Report November 1995.

U.S. Army Corps of Engineers. Chignik, Alaska, Small Boat Harbor: Interim Feasibility Report February 1996.

U.S. Army Corps of Engineers. Detailed Project Report, Port Lions, Alaska : Navigation Improvement for Small Boat Harbor. February 28, 1977.

U.S. Army Corps of Engineers. Dillingham, Alaska, Small Boat Harbor Improvements : Draft Detailed Project Report and Environmental Impact Statement. January 1983

U.S. Army Corps of Engineers. Dillingham, Alaska Small Boat Harbor Improvements: Final Detailed Project Report and Environmental Impact Statement. May 1985.

U. S. Army Corps of Engineers. Draft Detailed Project Report with Environmental Assessment: Small Boat Harbor, Larsen Bay, Alaska. September 1989.

U.S. Army Corps of Engineers. Environmental Assessment and FONSI: Expanded Three-Float Plan, Ouzinkie Small Boat Harbor, Ouzinkie, Alaska. August 1996.

U.S. Army Corps of Engineers. Environmental assessment, Humboldt Harbor, Maintenance Dredging: Sand Point, Alaska. July 1993.

U.S. Army Corps of Engineers. Environmental Assessment, Small Boat Harbor Maintenance Dredging, Old Harbor, Alaska. June 1993.

U.S. Army Corps of Engineers. Environmental Assessment, St. Paul Island Harbor, St. Paul, Alaska. February 1988.

U.S. Army Corps of Engineers. Extremal Analysis of Hindcast and Measured Wind and Wave Data at Kodiak, Alaska. June 1985.

U.S. Army Corps of Engineers. Interim Remedial Action for the North and South Barrel Bluffs, King Salmon, Alaska: Environmental Assessment. 1995.

U.S. Army Corps of Engineers. Kodiak Harbor, Alaska: Draft Supplemental Environmental Impact Statement. 1990.

U.S. Army. Corps of Engineers. Kodiak Harbor, Alaska: Final Supplemental Environmental Impact Statement. March 1991.

U.S. Army Corps of Engineers. Operation and Maintenance of the Dillingham Small Boat Harbor, Dillingham, Alaska: Final Environmental Impact Statement. 1974.

U.S. Army Corps of Engineers. Ouzinkie, Alaska: Small Boat Harbor Detailed Project Report and Environmental Assessment. October 1993.

U.S. Army Corps of Engineers. Proposed Port Lions Harbor project, Port Lions, Alaska. 1977.

U.S. Army Corps of Engineers. Proposed Port Lions Harbor project, Port Lions, Alaska: Draft Environmental Impact Statement. 1976.

U.S. Army Corps of Engineers. Proposed small boat harbor, Kodiak, Alaska: Final Environmental Impact Statement. August 1976.

U.S. Army Corps of Engineers. Record of Decision: Chignik Harbor, Chignik, Alaska. February 1997.

U.S. Army Corps of Engineers. Small Boat Harbor Detailed Project Report and Environmental Assessment: Ouzinkie, Alaska. January 1995.

U.S. Army Corps of Engineers. Small Boat Harbor Draft Supplemental Environmental Impact Statement, Chignik, Alaska. October 1989.

U.S. Coast and Geodetic Survey. United States, Alaska--South Coast, Kodiak Island, Womens Bay (map). July 10/93. (Relief shown by contours, hachures, and spot heights.)

U.S. Department of the Interior. The Bristol Bay Regional Management Plan And Final Environmental Impact Statement. 1985.

U.S. Department of the Interior. Draft Bristol Bay Cooperative Management Plan and Draft Environmental Impact Statement, agency review draft. February 1983

U.S. Department of Interior, Bureau of Land Management (Peat, Marwick, Mitchell & Co. and ERE Systems, Ltd.). St. George Basin Transportation Systems Impact Analysis. September 1981.

U.S. Department of the Interior, Bureau of Mines (Gary E. Sherman, et al.). Analysis of Iliamna Bay, Kotzebue, and Nome as Port Sites for Use by the Mineral Industry. 1990.

U.S. Department of Interior, Minerals Management Service. Bristol Bay Subsistence Harvest and Sociocultural Systems Inventory: Final Report. Technical report ; no. 150, OCS study. August 1992.

U.S. Department of the Interior, Minerals Management Service (Comer, C. Drew). Geologic Report for the St. George Basin Planning Area, Bering Sea, Alaska.

U.S. Department of Interior, Minerals Management Service (Louis Berger and Associates, Inc.). Navarin Basin (sale 83) Transportation Systems Impact Analysis. May 1983.

U.S. Department of Interior, Minerals Management Service. Subsistence-based Economies in Coastal Communities of Southwest Alaska. 1984.

U.S. Fish and Wildlife Service (Zimmerman, Marian). Chignik Small Boat Harbor Project, Expanded Reconnaissance Phase: Planning Aid Report. September, 1983.

U.S. Fish and Wildlife Service. Kodiak National Wildlife Refuge: Comprehensive Conservation Plan, Environmental Impact Statement. 1987.

U.S. Fish & Wildlife Service. Kodiak National Wildlife Refuge : Final Public Use Management Plan and Environmental Assessment. October 1993.

U.S. Fish and Wildlife Service. A Reconnaissance of the Nearshore Waters of Women's Bay, Kodiak Island. June 1985.

U.S. Fish and Wildlife Service (Western Alaska Ecological Services). Report of Biological Investigations on Proposed Harbor Sites, St. Paul Island, Alaska. September 1976.

U.S. Fish & Wildlife Service (Tweten, Randy G.). St. George Island Small Boat Harbor: Final Fish & Wildlife Coordination Act Report. May 1988.

U.S. Fish and Wildlife Service (Western Alaska Ecological Services). Togiak, Alaska, Navigation Improvements: Draft Fish and Wildlife Coordination Act Report. November 1985.

U.S. Fish and Wildlife Service. Togiak National Wildlife Refuge: Draft Public Use Management Plan and Environmental Assessment. April 1990.

U.S. Fish and Wildlife Service. Togiak National Wildlife Refuge: Final Comprehensive Conservation Plan, Wilderness Review, and Environmental Impact Statement. 1986.

U.S. Geological Survey. Bathymetric Maps of the Kodiak Outer Continental Shelf, Western Gulf of Alaska (map) 1979.

U.S. National Ocean Service. United States, Alaska--Alaska Peninsula, Shumagin Islands, Nagai Island to Unga Island. 3rd ed., Sept. 2/89. (Depths shown by isolines and soundings. Relief shown by contours, hachures, and spot heights).

U.S. National Transportation Safety Board. Marine Casualty Report--Grounding of the SS Hillyer Brown at Cold Bay, Alaska on 7 March 1973 Without Loss Of Life: U.S. Coast Guard Marine Board of Investigation Report and Commandant's Action. 1975.